

**METHOD FOR CONVECTION**  
**ENHANCED DELIVERY OF THERAPEUTIC AGENTS**

**ABSTRACT**

A method for monitoring and controlling convection enhanced delivery of a therapeutic agent to a target tissue is disclosed. A tracer that is detectable, for example, by magnetic resonance imaging (MRI) and/or by X-ray computed tomography (CT) is co-infused with the therapeutic agent and used to monitor the distribution of the therapeutic agent as it moves through the target tissue. The images obtained during delivery are used to confirm delivery of the therapeutic agent to the target tissue and to avoid exposure of tissue outside of the targeted area to the therapeutic agent. In addition, the signal intensity of the images may be used to confirm that the therapeutic agent has been delivered to the target tissue at a desired concentration.